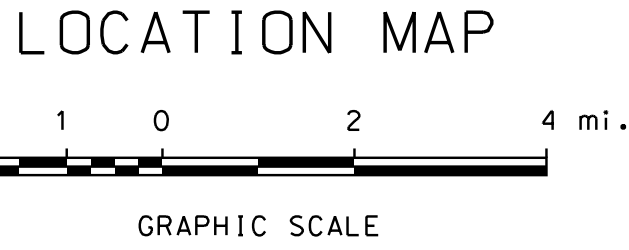
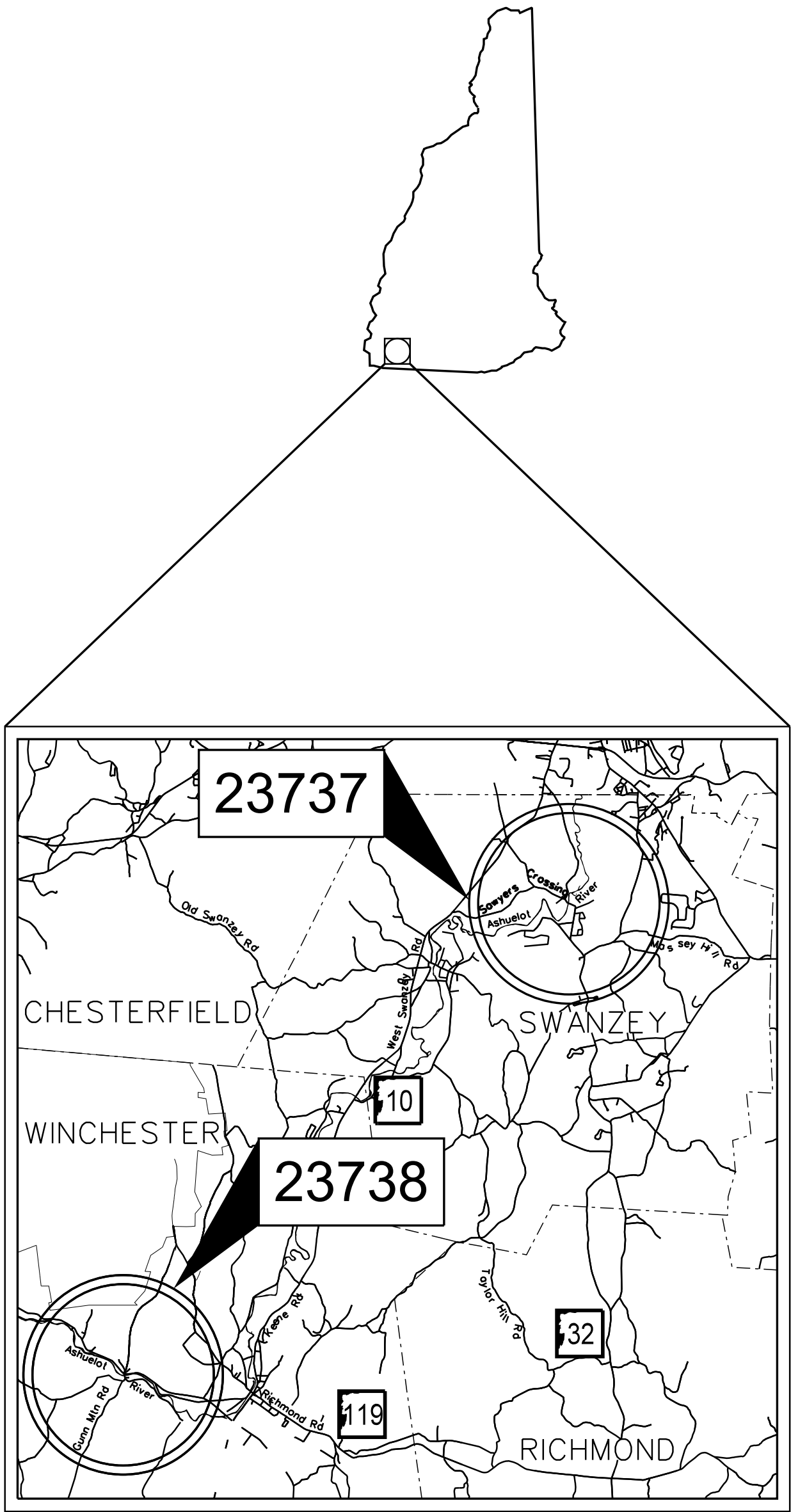


STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION

WETLAND PLANS
FEDERAL AID SCOUR MITIGATION PROJECT

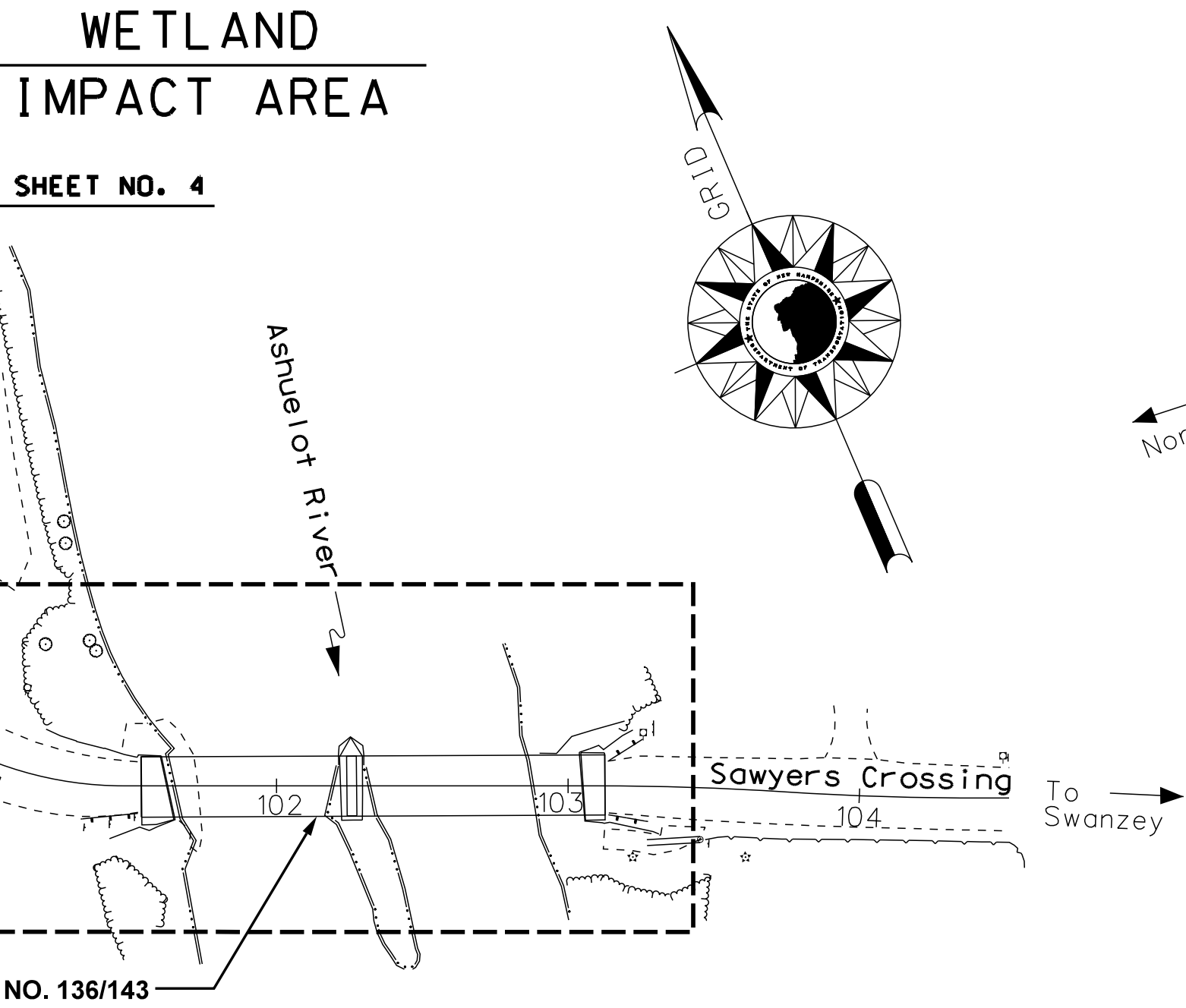
X-A002(758) / X-A002(760)
N.H. PROJECT NO. 23737 / 23738
SAWYERS CROSSING OVER ASHUELOT RIVER
GUNN MOUNTAIN ROAD OVER ASHUELOT RIVER
BRIDGE NO. 136/143 AND 082/087

DESIGN DATA	
AVERAGE DAILY TRAFFIC 20	-
AVERAGE DAILY TRAFFIC 20	-
PERCENT OF TRUCKS	-
DESIGN SPEED	-
LENGTH OF PROJECT	-

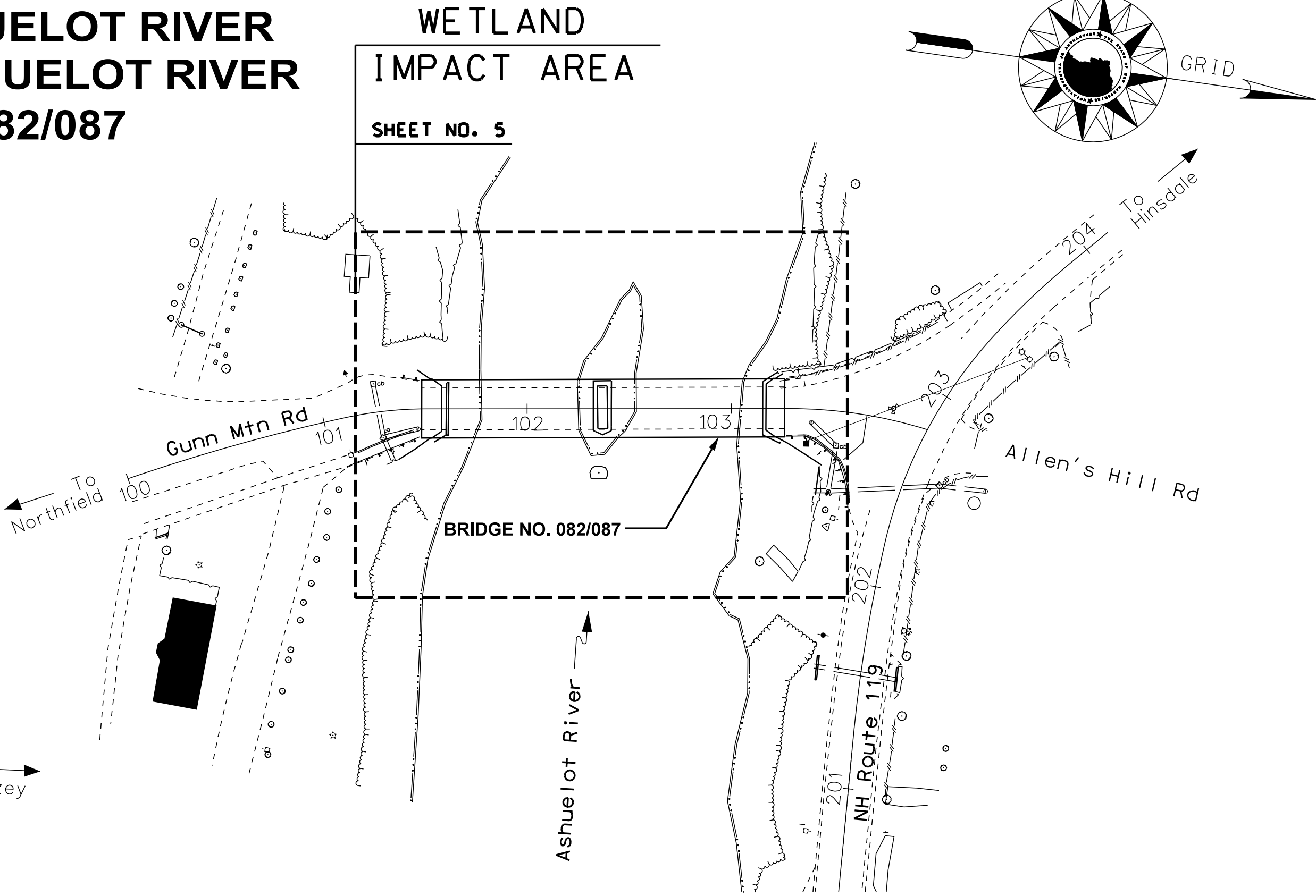


INDEX OF SHEETS

- 1 FRONT SHEET
- 2-3 STANDARD SYMBOLS SHEETS
- 4-5 WETLAND IMPACT PLANS



SWANZEY 23737



WINCHESTER 23738

TOWNS OF SWANZEY AND WINCHESTER
COUNTY OF CHESHIRE

SCALE: 1" = 50'

FOR CONSTRUCTION AND ALIGNMENT DETAILS - SEE CONSTRUCTION PLANS

PRELIMINARY PLANS
SUBJECT TO CHANGE

DATE 9/11/2015



GM2 Associates, Inc.
197 Loudon Road, Suite 310
Concord, NH 03301

Tel: 603-856-7854
Fax: 603-856-7855

NH DOT THE STATE OF
NEW HAMPSHIRE
DEPARTMENT OF
TRANSPORTATION

RECOMMENDED FOR APPROVAL:

DIRECTOR OF PROJECT DEVELOPMENT

DATE

ADMINISTRATOR, BUREAU OF MUNICIPAL HIGHWAYS

DATE

APPROVED:

ASSISTANT COMMISSIONER AND CHIEF ENGINEER

DATE

FEDERAL PROJECT NO.	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
X-A002(758)/(760)	23737-23738	1	7

GENERAL

EDGE OF PAVEMENT
TRAVELED WAY

PROPOSED ROADWAY
existing roadway
(pavement removed outside slope lines)

DRIVEWAYS
(label surface type)

BUILDINGS
(label house or type of building)
(building to be removed)

FOUNDATION
(label type)

LEACH FIELD
leach field

BRIDGE CROSSINGS
STREAM
OVERPASS

STEPS AND WALK
(label type)

INTERMITTENT WATER COURSE

SHORE LINE
river/stream
pond (label name of water body)

POTENTIAL WET AREA SYMBOL

BRUSH OR WOODS LINE
(deciduous)(coniferous) (stump)

TREES (PLANS)
(show station, circumference in feet & type)

TREE OR STUMP (CROSS-SECTIONS)

HEDGE
(label type)

MONITORING WELL
mon W

WELL
W

FLAG POLE
fp

ORIGINAL GROUND (TYPICALS)

ROCK OUTCROP

ROCK LINE (TYPICALS & SECTIONS ONLY)

GUARDRAIL (label type)

JERSEY BARRIER

CURB (LABEL TYPE)

STONE WALL

RETAINING WALL (LABEL TYPE)

FENCE (LABEL TYPE)

SIGNS
(single post)
(double post)

GAS PUMP
gp

FUEL TANK (ABOVE GROUND)
ft (label size & type)

STORAGE TANK FILLER CAP
fc

SEPTIC TANK
S

GRAVE
gr

MAILBOX
mb

VENT PIPE
vp

SATELLITE DISH ANTENNA
da

PHONE
ph

GROUND LIGHT/LAMP POST
gl lp

BORING LOCATION
B

TEST PIT
TP

INTERSTATE NUMBERED HIGHWAY
293

UNITED STATES NUMBERED HIGHWAY
3

STATE NUMBERED HIGHWAY
102

SHORELAND - WETLAND

WETLAND DESIGNATION AND TYPE

DELINEATED WETLAND
ORDINARY HIGH WATER
TOP OF BANK
TOP OF BANK & ORDINARY HIGH WATER
NORMAL HIGH WATER
WIDTH AT BANK FULL
PRIME WETLAND
PRIME WETLAND 100' BUFFER
NON-JURISDICTIONAL DRAINAGE AREA
COWARDIN DISTINCTION LINE
TIDAL BUFFER ZONE
DEVELOPED TIDAL BUFFER ZONE
HIGHEST OBSERVABLE TIDE LINE
MEAN HIGH WATER
MEAN LOW WATER
VERNAL POOL
SPECIAL AQUATIC SITE
REFERENCE LINE
WATER FRONT BUFFER
NATURAL WOODLAND BUFFER
PROTECTED SHORELAND
INVASIVE SPECIES LABEL
INVASIVE SPECIES

PUB2E
DW
OH
TOB
TOBOHW
NH
WBF
PWET
PWET100
NJDA
CDL
TBZ
DTBZ
HOTL
MHW
MLW
VP
SAS
REF
WB50
NWB150
PS250
I.S.
INV

FLOODPLAIN / FLOODWAY

500 YEAR FLOODPLAIN BOUNDARY
100 YEAR FLOODPLAIN BOUNDARY
FLOODWAY

FP500
FP100
FW

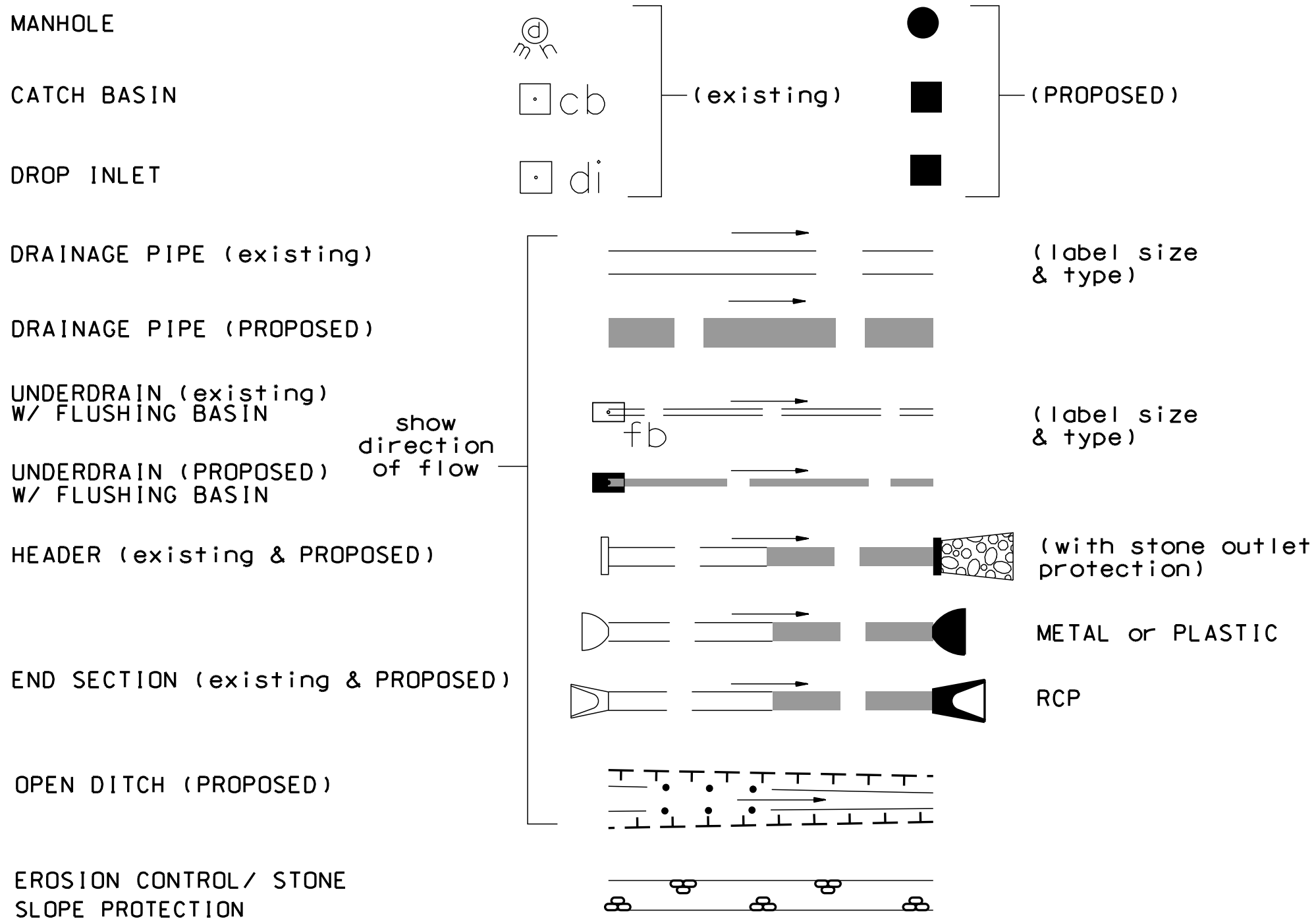
ENGINEERING

CONSTRUCTION BASELINE
PC, PT, POT (ON CONST BASELINE)
PI (IN CONSTRUCTION BASELINES)
INTERSECTION OR EQUATION OF TWO LINES
ORIGINAL GROUND LINE (PROFILES AND CROSS-SECTIONS)
PROFILE GRADE LINE (PROFILES AND CROSS-SECTIONS)
CLEARING LINE
SLOPE LINE
SLOPE LINE (FILL)
SLOPE LINE (CUT)
PROFILES AND CROSS SECTIONS:
ORIGINAL GROUND ELEVATION (LEFT)
FINISHED GRADE ELEVATION (RIGHT)

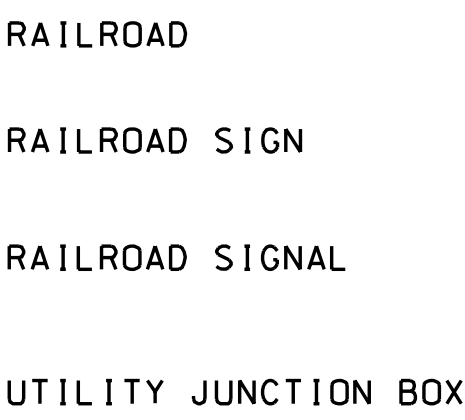
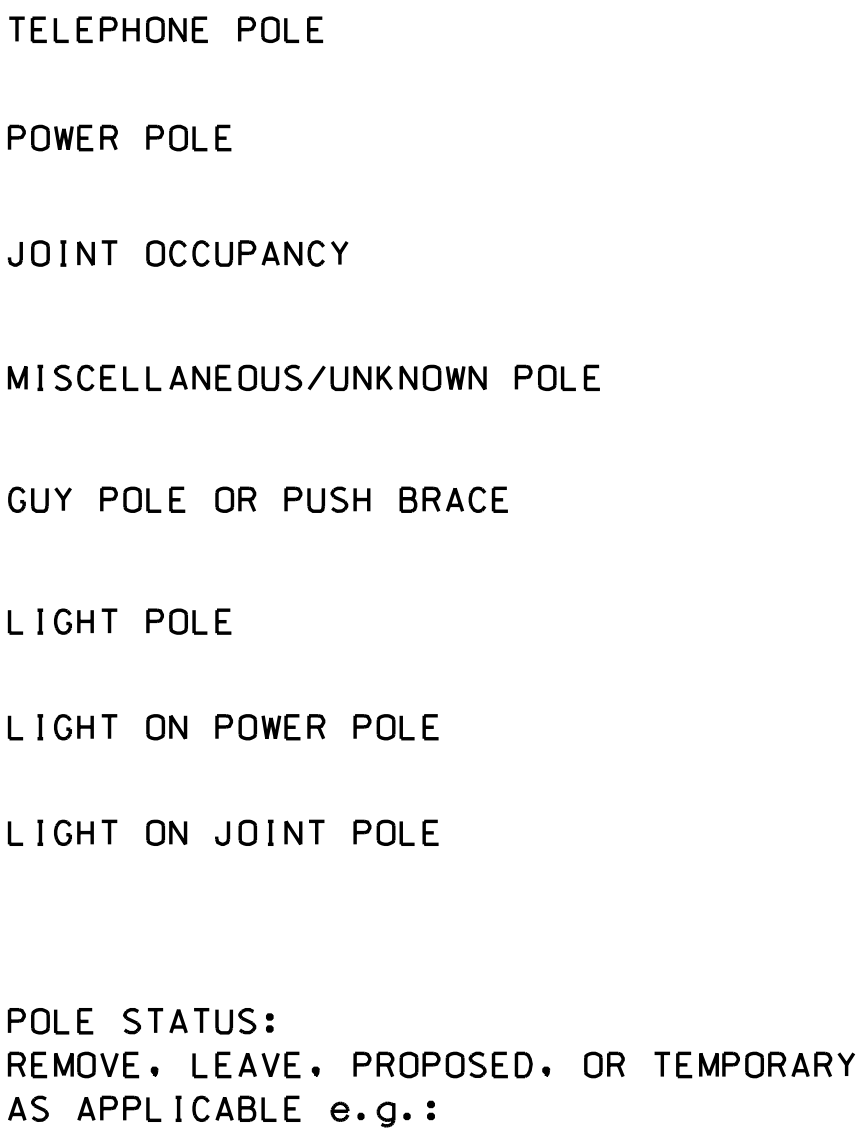
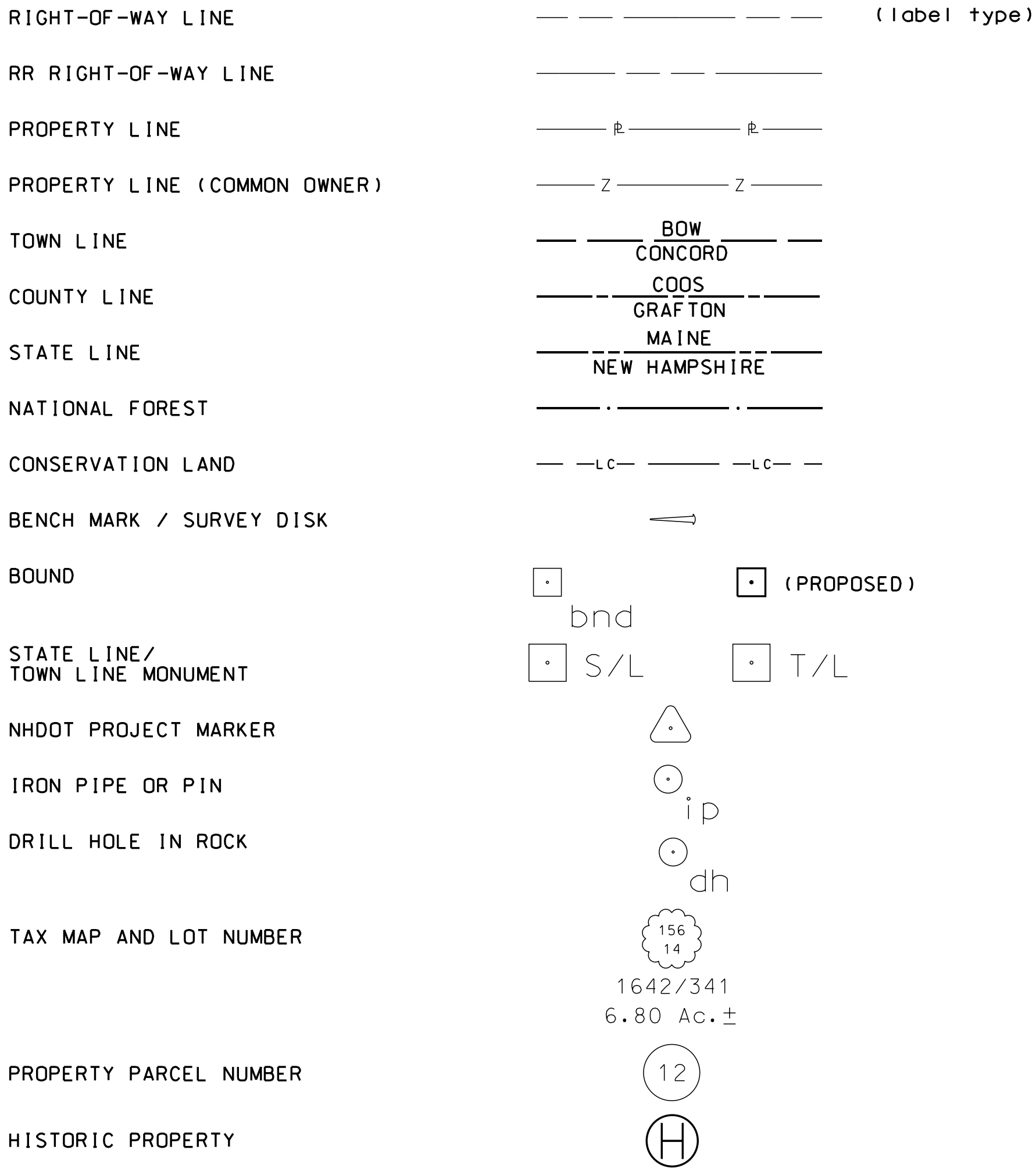
30 31 32
1
2
SLOPE LINE
CLEARING LINE
12.5
19.14

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
11-21-2014	23737STD	23737-23738	2	7

DRAINAGE



BOUNDARIES / RIGHT-OF-WAY



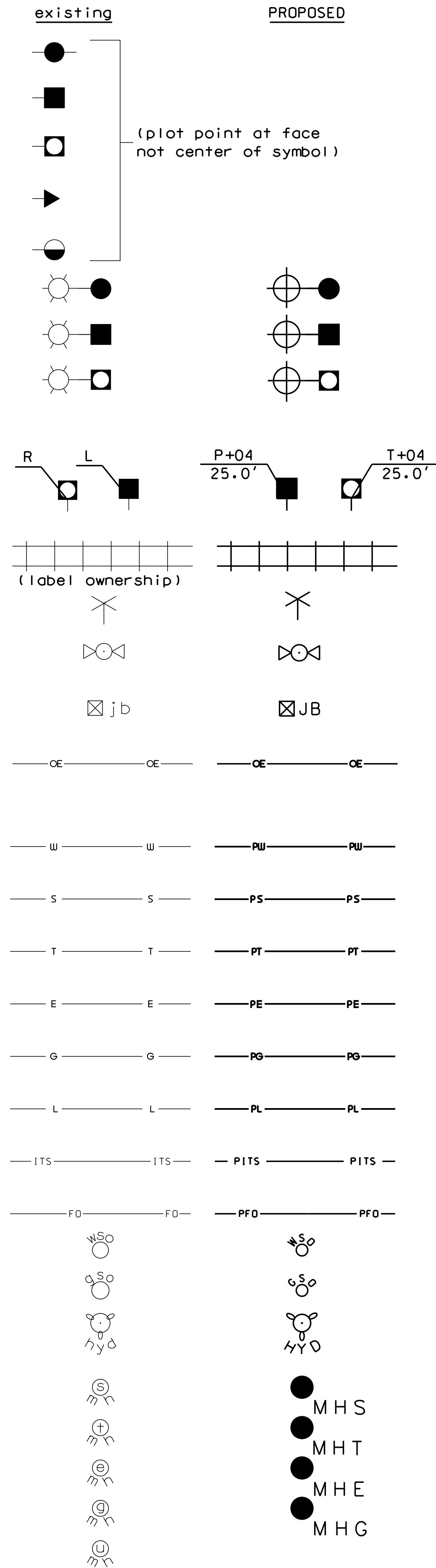
UNDERGROUND UTILITIES



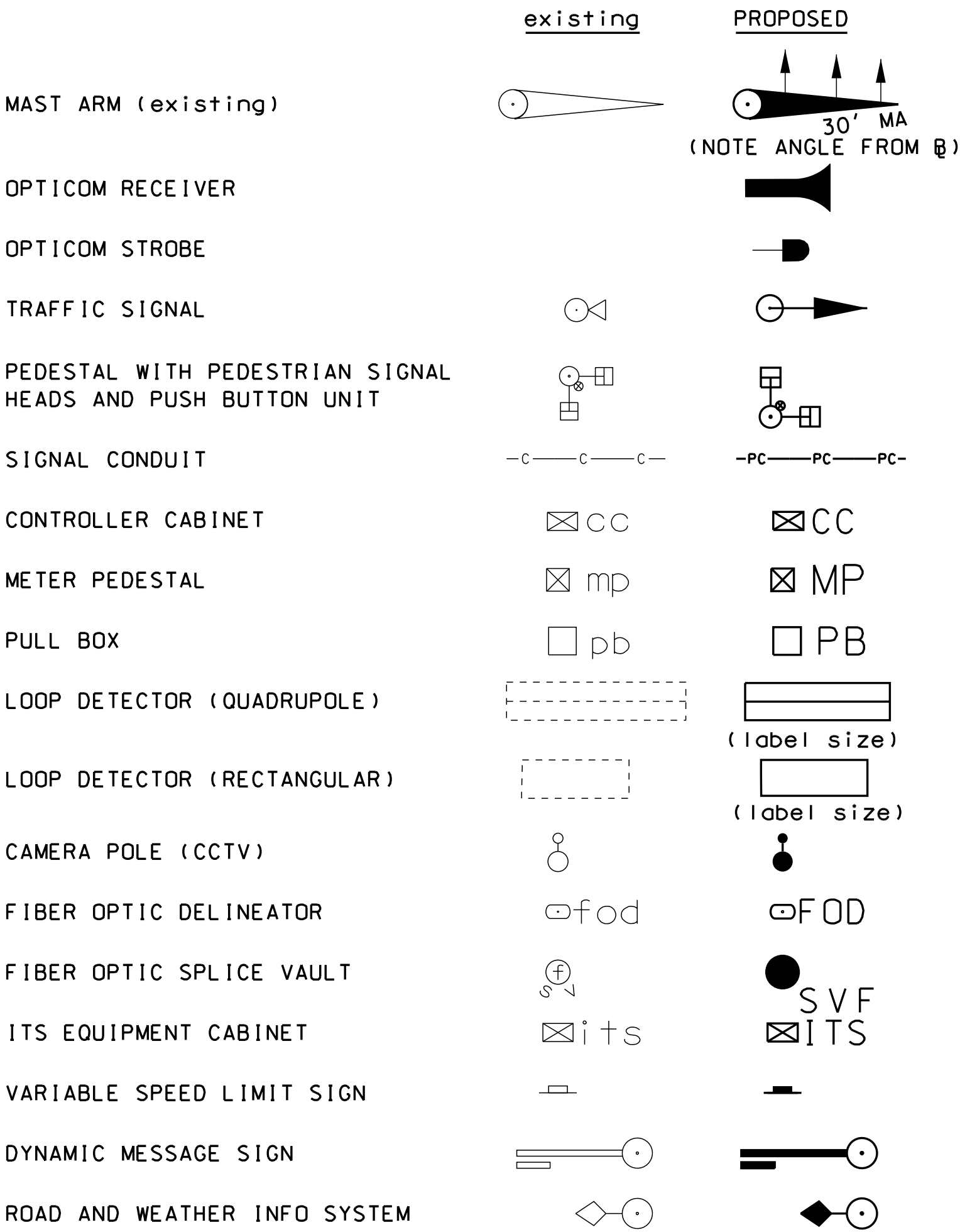
MANHOLES



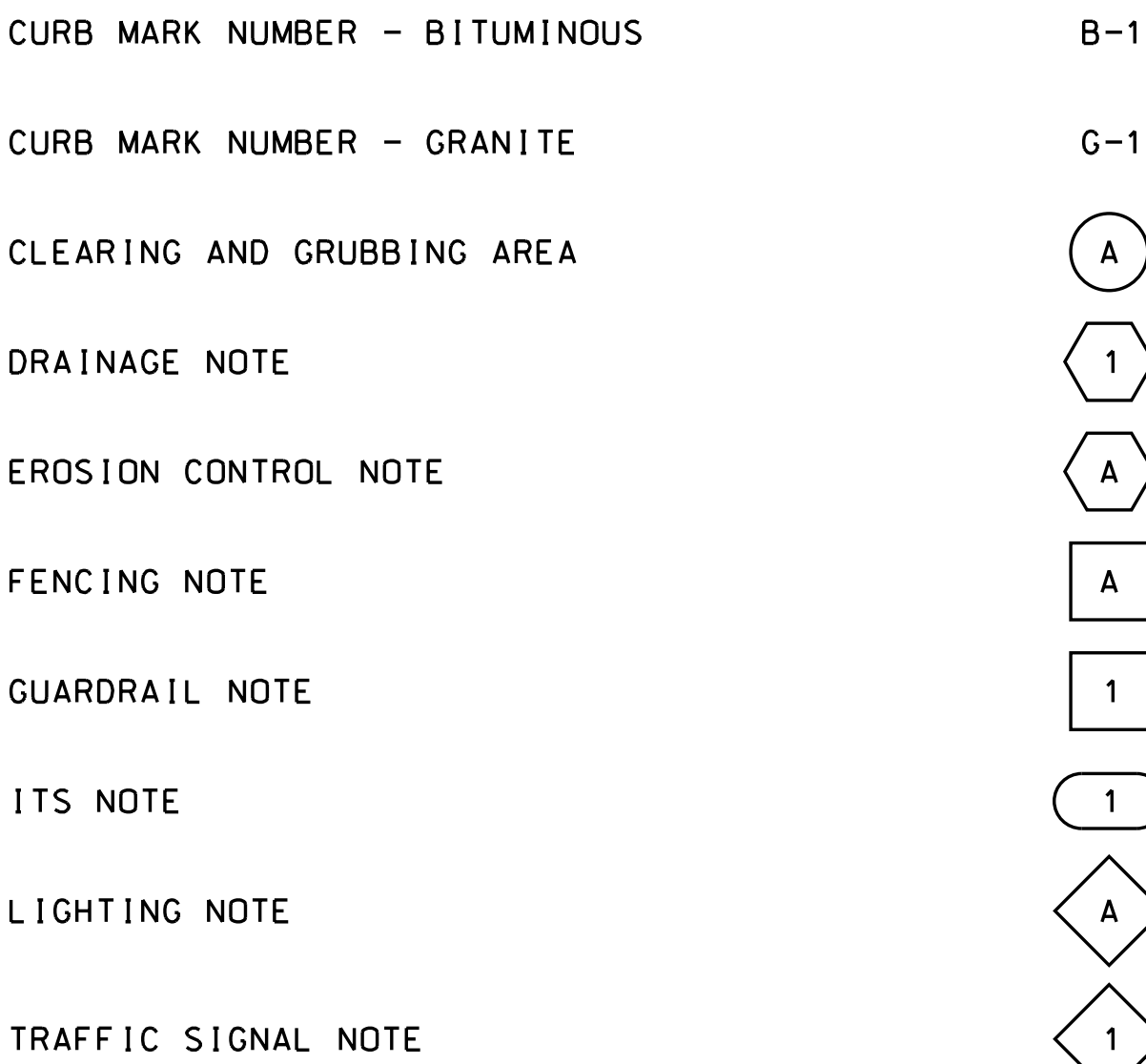
UTILITIES



TRAFFIC SIGNALS / ITS



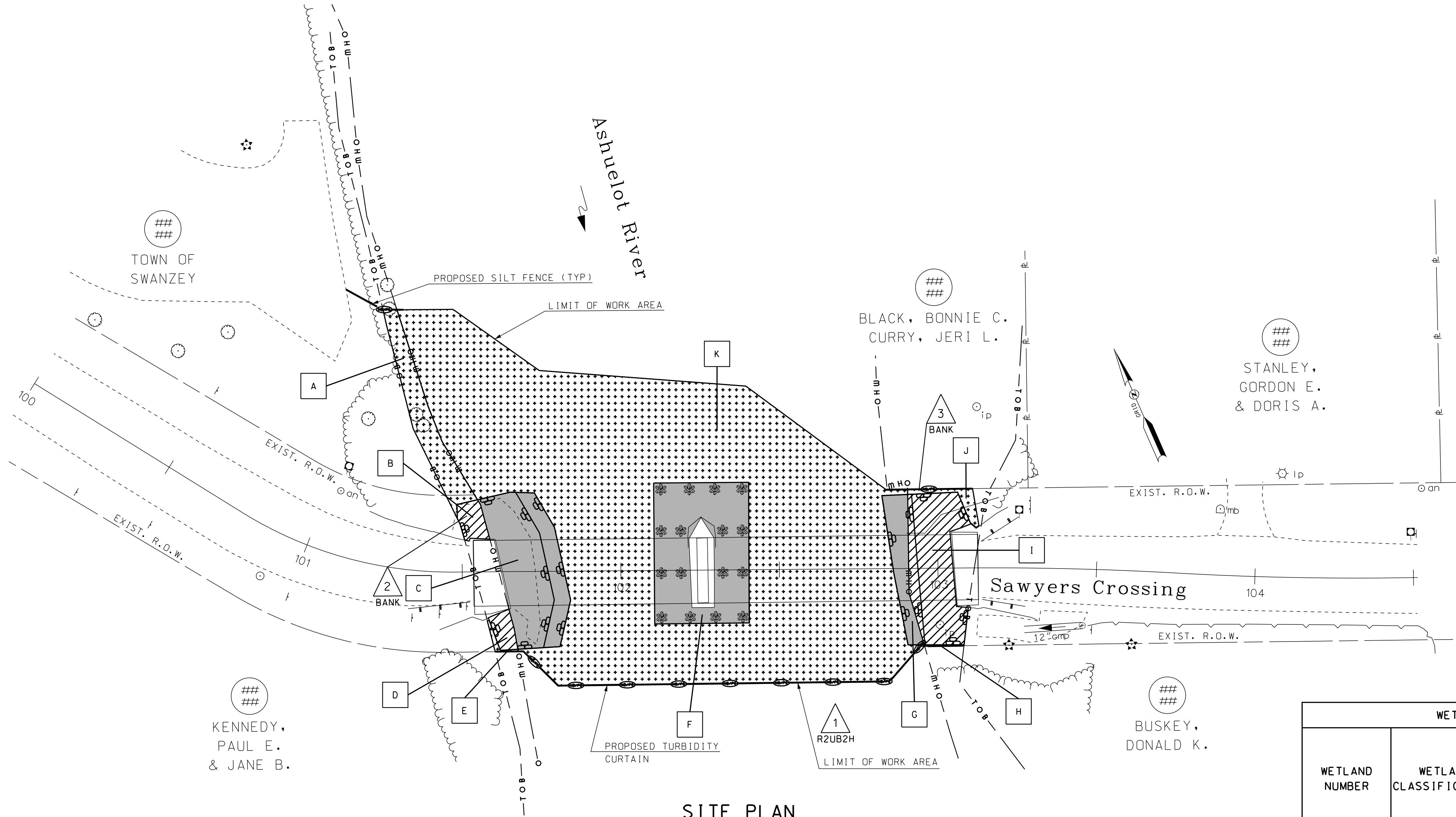
CONSTRUCTION NOTES



SHEET 2 OF 2

STATE OF NEW HAMPSHIRE				
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN				
STANDARD SYMBOLS				
REVISION DATE	DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
11-21-2014	23737STD SYMB 2	23737-23738	3	7

REVISIONS AFTER PROPOSAL		STATION		STATION		DATE		DATE	
		NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION	NUMBER	DESCRIPTION
SDR PROCESSED	NAME1	DATE1	DATE1	DATE2	DATE2	DATE3	DATE3	DATE	DATE
NEW DESIGN	NAME2	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
SHEET CHECKED	NAME3	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
AS BUILT	DETAILS	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE



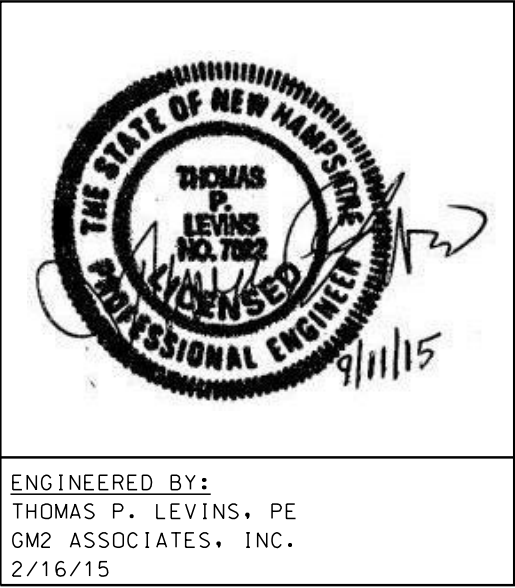
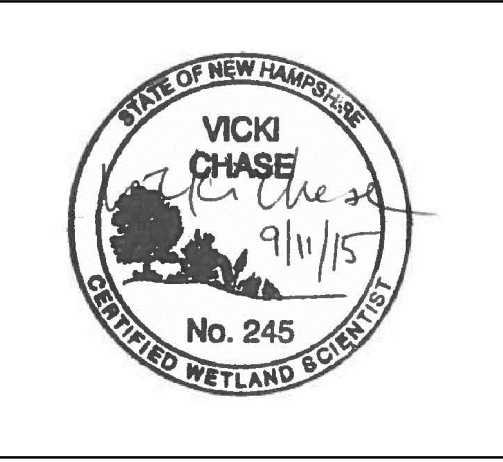
EROSION CONTROL LEGEND	
	PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	NATURAL BUFFER/PERIMETER CONTROL SILT FENCE EROSION CONTROL MIX BERM EROSION CONTROL MIX SOX TURBIDITY CURTAIN SHEET PILE COFFER DAM
	CHANNEL PROTECTION STONE CHECK DAMS STRAW WATTLES CHANNEL MATTING CLASS D EROSION STONE CLASS C STONE
	CLEAN WATER BYPASS PUMP THROUGH PIPE DRAIN THROUGH PIPE OR CHANNEL

WETLAND IMPACT SUMMARY - SWANZEY 23737					
WETLAND NUMBER	WETLAND CLASSIFICATION	LOCATION	AREA		
			PERMANENT IMPACTS		TEMPORARY IMPACTS
			N.H.W.B. (NON-WETLAND)	N.H.W.B. & A.C.O.E. (WETLAND)	
			SF	SF	SF
2	BANK	A			410
2	BANK	B	99		
1	R2UB2H	C		908	
2	BANK	D	76		
2	BANK	E			15
1	R2UB2H	F		1137	
1	R2UB2H	G		256	
3	BANK	H			5
3	BANK	I	722		
3	BANK	J			65
1	R2UB2H	K			10019

PERMANENT IMPACTS: 3198 SF
TEMPORARY IMPACTS: 10514 SF
TOTAL IMPACTS: 13712 SF

PERMANENT IMPACTS TO BANKS: 72 LF
PERMANENT IMPACTS TO CHANNELS: 185 LF

STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
WETLAND IMPACT PLAN SWANZEY - 23737			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
23737PWT	23737-23738	4	7



NOTE:
WETLANDS WERE DELINEATED BY NORMANDEAU ASSOCIATES, INC. ON AUGUST 16, 2013. THE WETLAND DELINEATION WAS COMPLETED IN ACCORDANCE WITH THE CRITERIA DESCRIBED IN THE U.S. ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL TECHNICAL REPORT Y-87-1 (JANUARY 1987) AND THE REGIONAL SUPPLEMENT FOR THE NORTHCENTRAL AND NORTHEAST REGION (JANUARY 2012) AND MEETS THE CRITERIA FOR WETLAND DELINEATION IN ACCORDANCE WITH THE NHDES ADMINISTRATIVE RULES ENV-WT 301.01.

WETLAND CLASSIFICATION CODES	
R2UB2H	RIVERINE, LOWER PERENNIAL, UNCONSOLIDATED BOTTOM, SAND, PERMANENTLY FLOODED

SITE PLAN
SCALE: 1" = 20'-0"

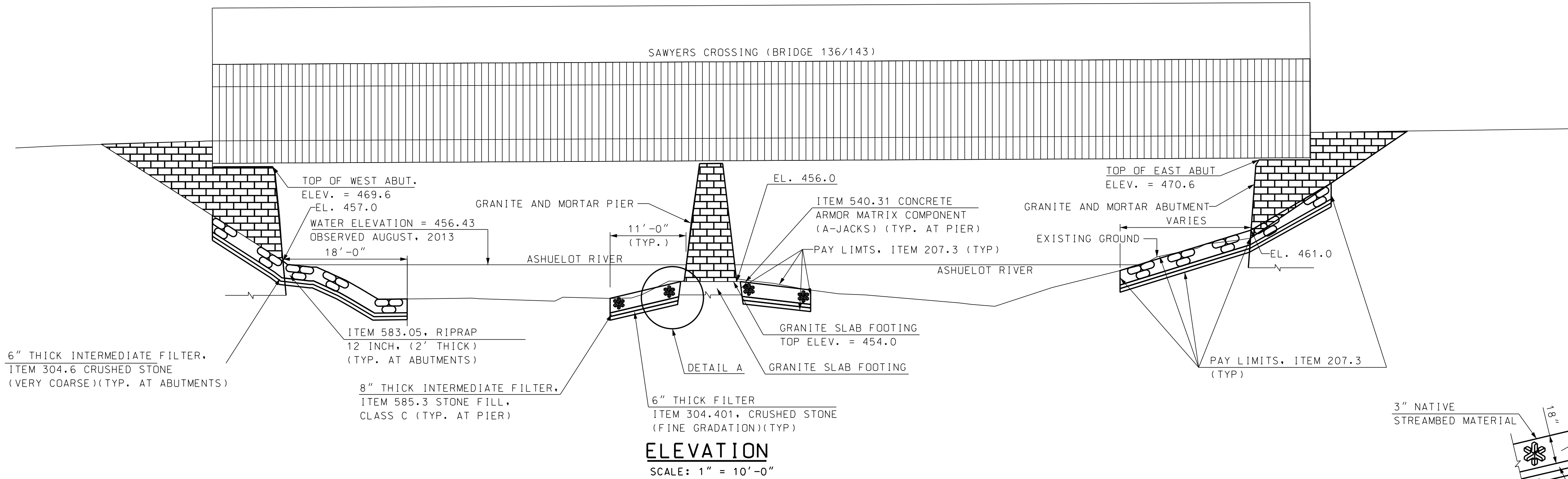
TYPE OF WETLAND IMPACT	SHADING/HATCHING
NEW HAMPSHIRE WETLANDS BUREAU (PERMANENT NON-WETLAND)	
NEW HAMPSHIRE WETLANDS BUREAU & ARMY CORP OF ENGINEERS (PERMANENT WETLAND)	
TEMPORARY IMPACTS	

LEGEND

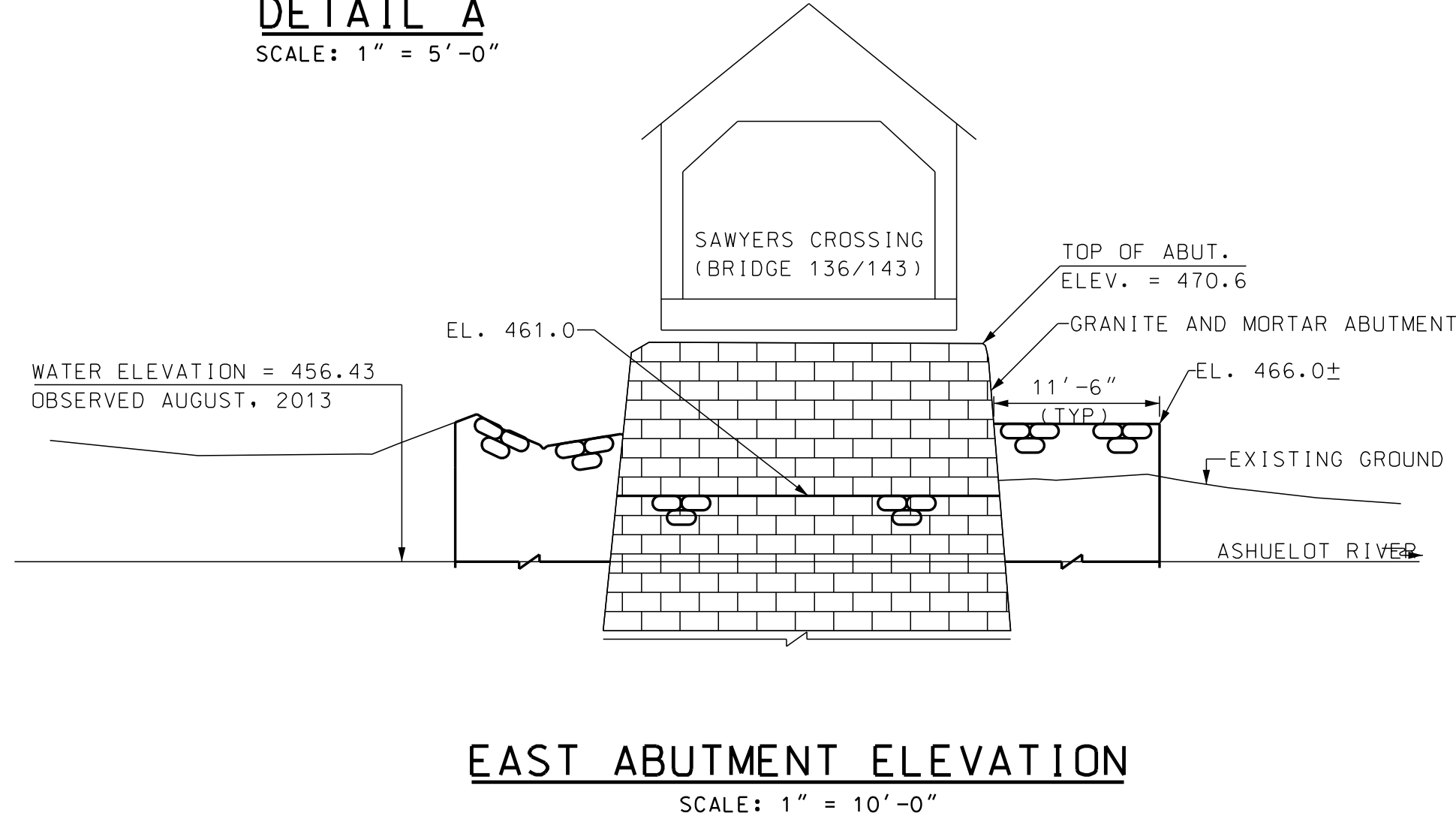
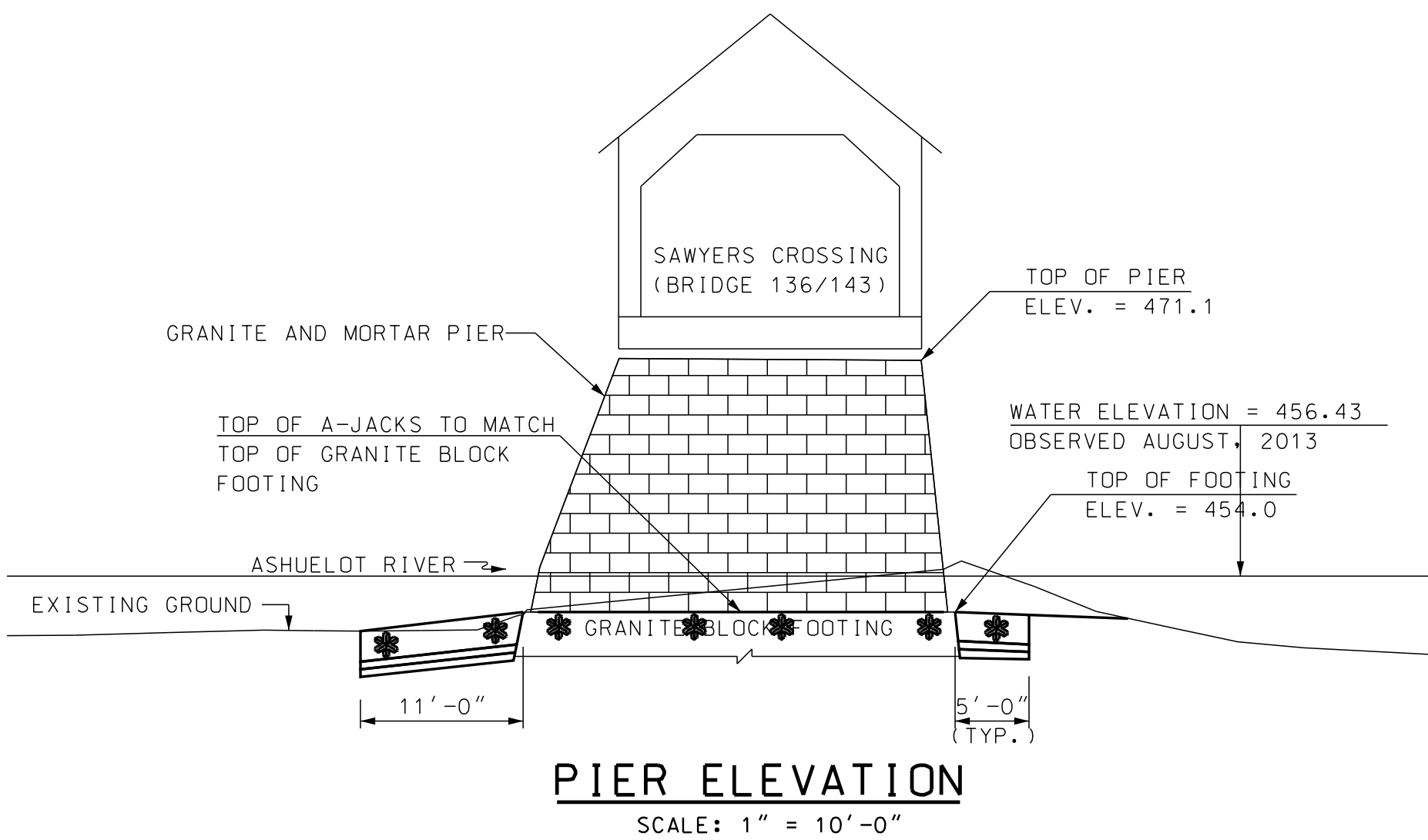
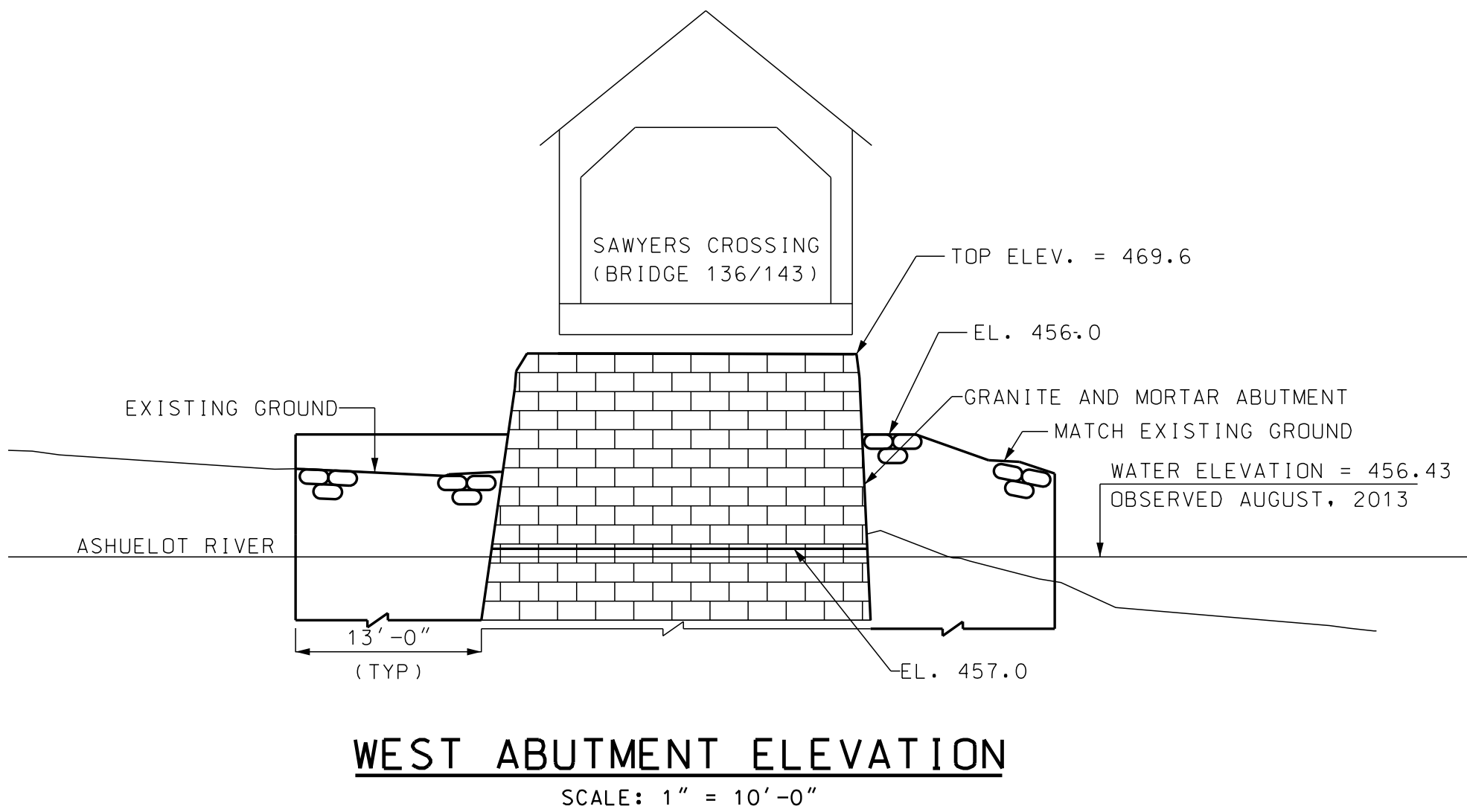
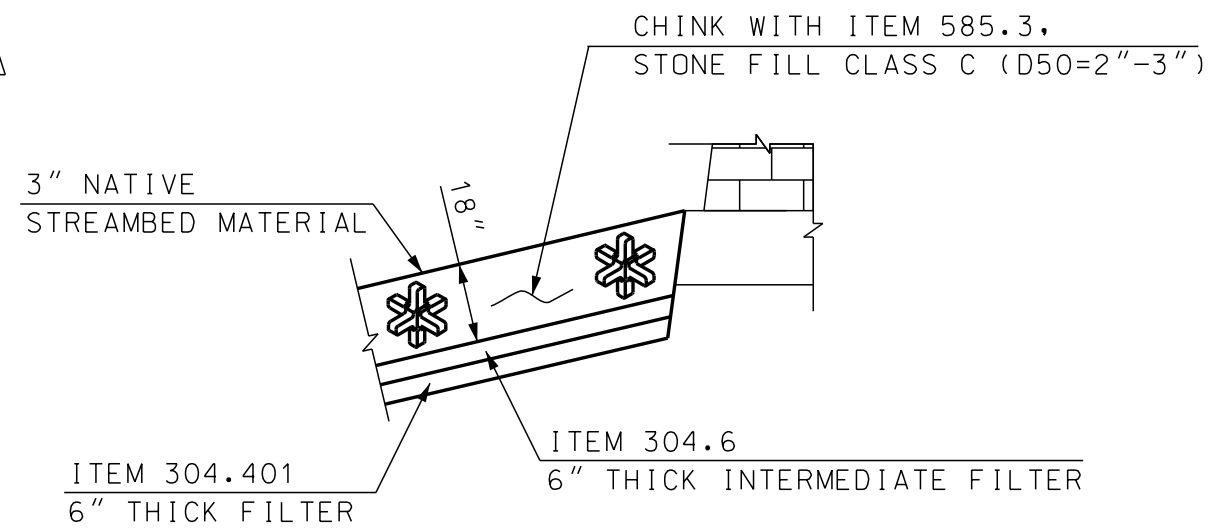
- WETLAND DESIGNATION NUMBER
- WETLAND IMPACT LOCATION
- WETLAND MITIGATION AREA
- MITIGATION



REVISIONS AFTER PROPOSAL		STATION		DESCRIPTION	
		NUMBER	DATE	STATION	DESCRIPTION
SDR PROCESSED	NAME1	DATE1	DATE1		
NEW DESIGN	NAME2	DATE2	DATE2		
SHEET CHECKED	NAME3	DATE3	DATE3		
AS BUILT DETAILS			DATE		

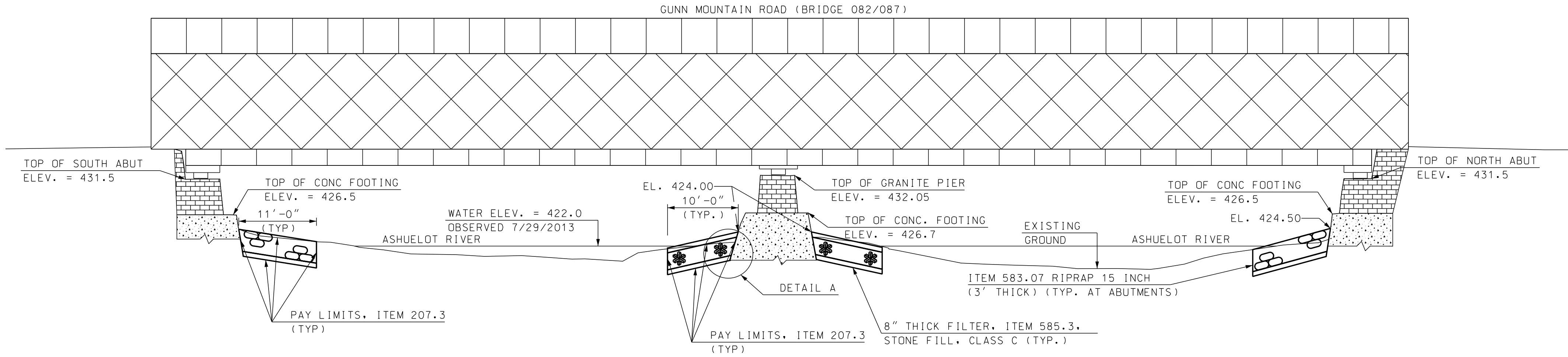


- NOTES:
- ITEM 583.05 RIPRAP 12 INCH SHALL BE USED AS A TRANSITION FROM THE A-JACKS ARMORING TO THE EXISTING STREAM BED IN THE PIER AREA AS REQUIRED.
 - CONTRACTOR SHALL DEMONSTRATE FAMILIARITY WITH KNOWLEDGE OF PROPER PLACEMENT OF THE A-JACKS TO THE SATISFACTION OF THE ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL SUBMIT A HANDLING AND PLACEMENT PLAN FOR APPROVAL PRIOR TO RECEIVING A-JACKS UNITS AT THE SITE.
 - A-JACKS ARMORING SHALL EXTEND 11 FEET (MEASURED AT BASE OF PIER AT STREAMBED) BEYOND THE UPSTREAM AND SIDE FACES OF THE PIER. THE A-JACKS ARMORING SHALL EXTEND 5 FEET BEYOND DOWNSTREAM FACE OF PIER.
 - THE LIMITS OF RIPRAP 12 INCH AT ABUTMENTS SHALL BE AS SHOWN.
 - EXISTING RIPRAP AT THE WEST ABUTMENT SHALL BE INSPECTED BY THE ENGINEER TO DETERMINE IF SATISFACTORY TO BE LEFT IN PLACE. NEW RIPRAP SHALL BE PLACED TO THE LIMITS SHOWN TO SUPPLEMENT ANY RIPRAP LEFT IN PLACE AS DIRECTED.

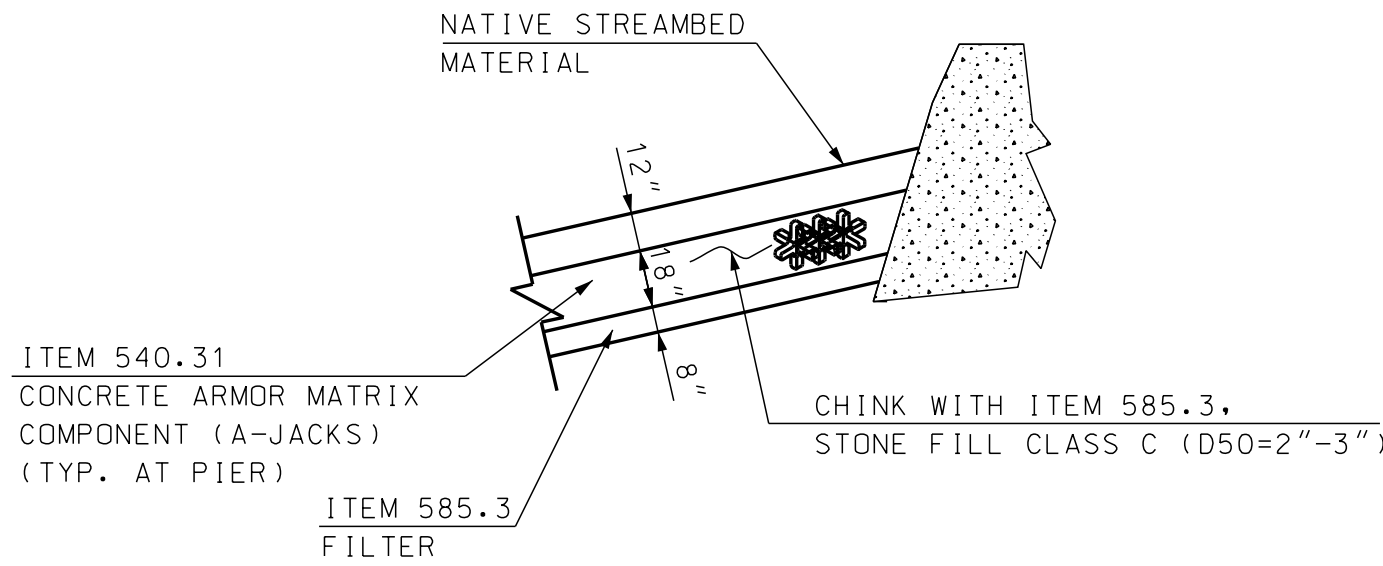


STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
SCOUR MITIGATION DETAILS SWANZEY - 23737			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
23737DET01_WET	23737-23738	6	7

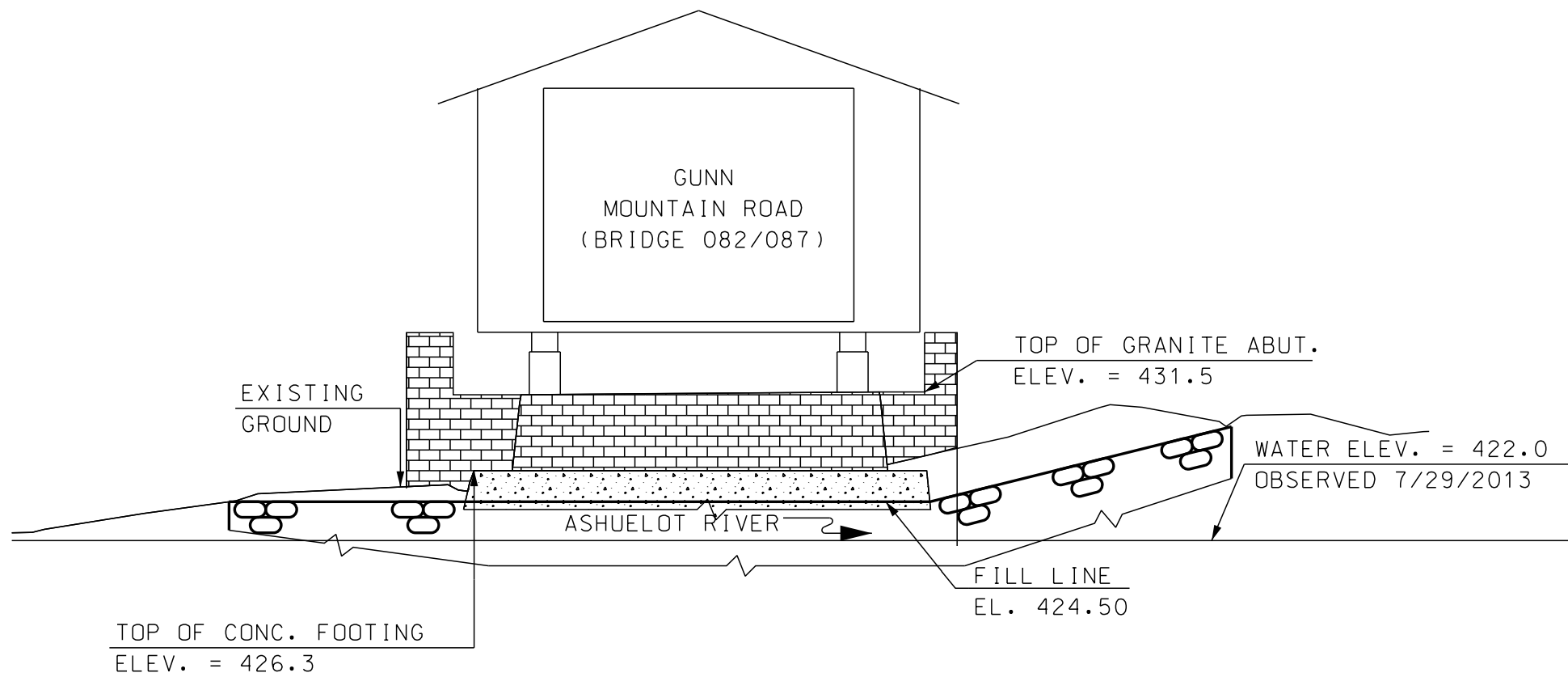
REVISIONS AFTER PROPOSAL		DESCRIPTION		STATION		DATE		STATION		DATE	
		NUMBER									
SDR PROCESSED	NAME1	DATE	DATE1								
NEW DESIGN	NAME2	DATE	DATE2								
SHEET CHECKED	NAME3	DATE	DATE3								
AS BUILT DETAILS											



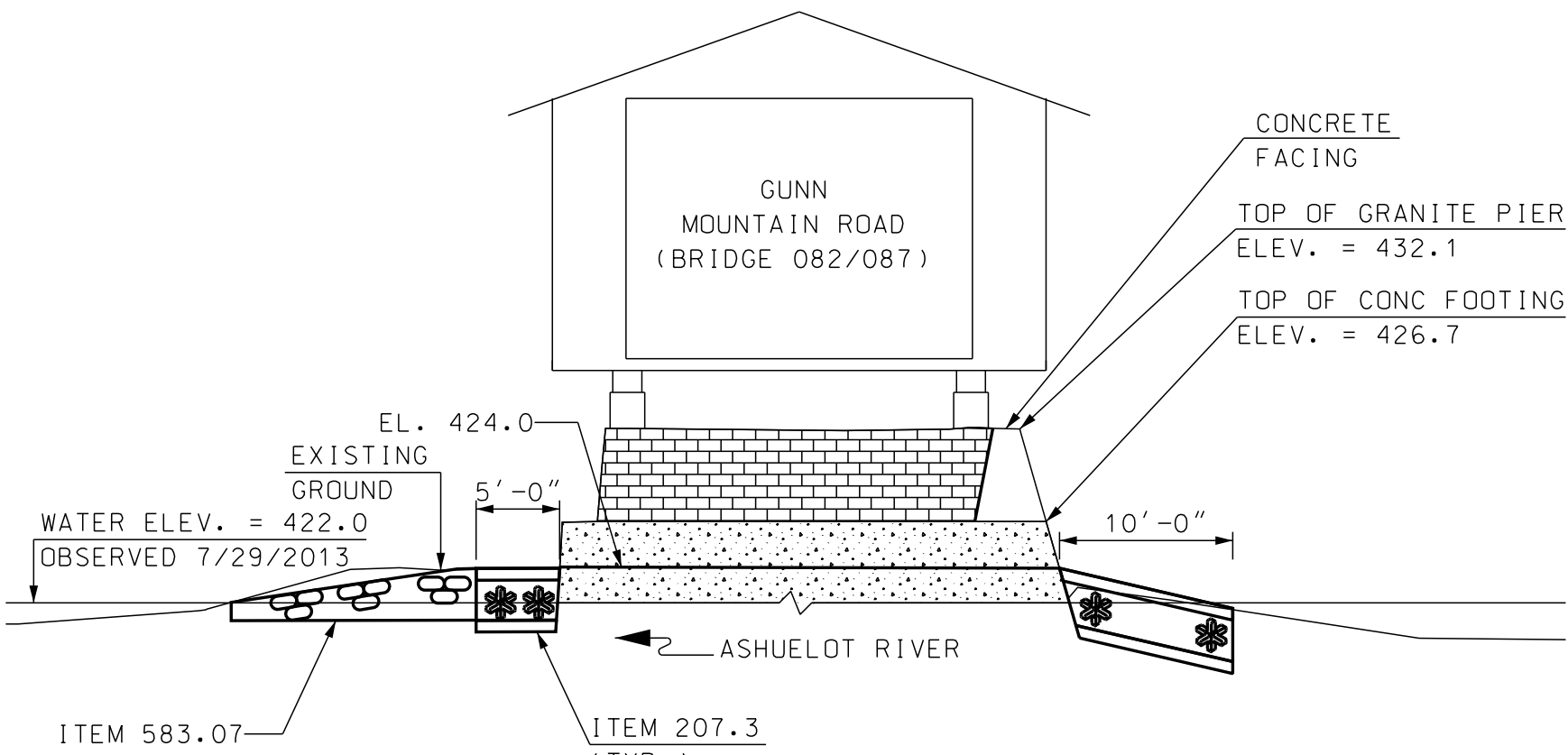
LONGITUDINAL BRIDGE SECTION
SCALE: 1" = 10'-0"



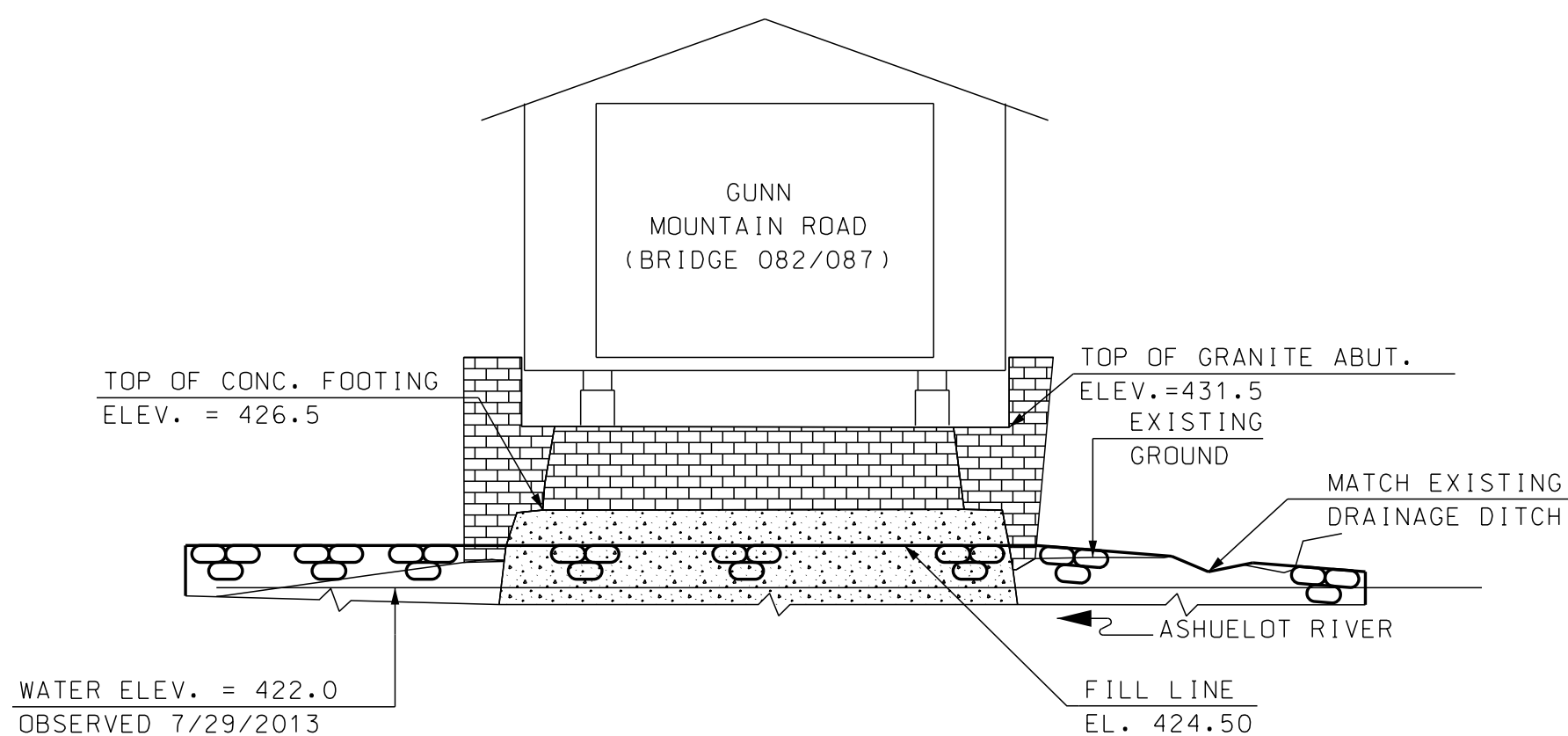
DETAIL A
SCALE: 1" = 5'-0"



SOUTH ABUTMENT ELEVATION
SCALE: 1" = 10'-0"



PIER SECTION
SCALE: 1" = 10'-0"



NORTH ABUTMENT ELEVATION
SCALE: 1" = 10'-0"

NOTES:

- ITEM 583.07 RIPRAP 15 INCH SHALL BE USED AS A TRANSITION FROM THE A-JACKS ARMORING TO THE EXISTING STREAM BED AS REQUIRED.
- CONTRACTOR SHALL DEMONSTRATE FAMILIARITY AND KNOWLEDGE OF PROPER PLACEMENT OF THE A-JACKS ARMORING TO THE SATISFACTION OF THE ENGINEER PRIOR TO INSTALLATION. THE CONTRACTOR SHALL SUBMIT A HANDLING AND PLACEMENT PLAN FOR APPROVAL PRIOR TO RECEIVING A-JACKS UNITS AT THE SITE.
- A-JACKS ARMORING SHALL EXTEND 10 FEET BEYOND THE UPSTREAM AND SIDE FACES OF THE PIER FOOTING. THE A-JACKS ARMORING SHALL EXTEND 5 FEET BEYOND DOWNSTREAM FACE OF THE PIER FOOTING.
- THE LIMITS OF RIPRAP 15 INCH AT ABUTMENTS SHALL BE AS SHOWN.



STATE OF NEW HAMPSHIRE			
DEPARTMENT OF TRANSPORTATION • BUREAU OF HIGHWAY DESIGN			
SCOUR MITIGATION DETAILS WINCHESTER - 23738			
DGN	STATE PROJECT NO.	SHEET NO.	TOTAL SHEETS
23738DET01_WET	23737-23738	7	7